Indicators Used in Development Factors for 2018 Tier Rankings

MEASURE	CONCEPT	RESIDENTS OR GOVERNMENTS	TIME PERIOD	DATA SOURCE	DATA YEAR	DATA RELEASE DATE
AVERAGE MONTHLY UNEMPLOYMENT RATE	joblessness	residents	short-term	N.C. Department of Commerce, Local Area Unemployment Statistics	Oct. 2016- Sept. 2017	11/1/17
MEDIAN HOUSEHOLD INCOME	household economic well-being	residents	short-term	U.S. Census Bureau, Small Area Income and Poverty Estimates	2015	12/14/16
PERCENTAGE GROWTH IN POPULATION	population change	indirect; residents and governments	long-term	N.C. Office of State Budget & Management	July 2013- July 2016	9/27/17
ADJUSTED PROPERTY TAX BASE PER CAPITA	tax capacity	governments	short-term	property tax: N.C. Department of Public Instruction population: N.C. Office of State Budget & Management	property tax: FY 2015-16 population: July 2016	property tax: 3/22/17 population: 9/27/17

Indicators Used in Adjustment Factors for 2018 Tier Rankings

MEASURE	CONCEPT	RESIDENTS OR GOVERNMENTS	TIME PERIOD	DATA SOURCE	DATA YEAR	DATA RELEASE DATE
POPULATION LESS PRISON	county size	not relevant	short-term	N.C. Office of State Budget & Management	July 2013- July 2016	9/27/17
POVERTY RATE	household economic well-being	residents	long-term	U.S. Census Bureau, American Community Survey 5-Year Estimates	2011-2015	12/8/16

Indicators for "County Resident Distress Ranking" Proposed by Representative Martin

MEASURE	CONCEPT	RESIDENTS OR GOVERNMENTS	TIME PERIOD	DATA SOURCE	DATA YEAR	DATA RELEASE DATE
AVERAGE ANNUAL EARNINGS BY PLACE OF WORK	job quality	residents	short-term	U.S. Bureau of Economic Analysis, Local Area Personal Income	2016	11/16/17
MEDIAN HOUSEHOLD INCOME	household economic well-being	residents	short-term	U.S. Census Bureau, Small Area Income and Poverty Estimates	2016	11/30/17
PERCENTAGE GROWTH IN NUMBER OF JOBS	employment opportunity	residents	long-term	U.S. Bureau of Economic Analysis, Local Area Personal Income	2013-2016	11/16/17
PERCENT OF POPULATION AGE 25+ WITH SOME COLLEGE	economic mobility	residents	long-term	U.S. Census Bureau, American Community Survey 5-Year Estimates	2012-2016	12/7/17



Indicators for "Government Distress Ranking" Proposed by Representative Martin

MEASURE	CONCEPT	RESIDENTS OR GOVERNMENTS	TIME PERIOD	DATA SOURCE	DATA YEAR	DATA RELEASE DATE
ADJUSTED PROPERTY TAX BASE PER CAPITA	tax capacity	governments	short-term	NC Dept. of Revenue	2016	property tax: 3/22/17 population: 9/27/17
SALES TAX BASE PER CAPITA	tax capacity	governments	short-term	NC Dept. of Revenue	FY 2016-17	sales tax: 12/7/17 population: 9/27/17



Measuring Economic Well-Being of County Residents

The quality or usefulness of a composite indicator of economic distress of county residents can be evaluated by its:

- 1. **Relevance:** each of the indicators that are included in the composite indicator should reflect the intended meaning of the concept being measured in this case, the concept being measured is "economic well-being of county residents", particularly in the context of economic development; and
- 2. **Representativeness**: the group of included indicators should fully reflect the various aspects of the concept being measured and reflect their relative importance to the overall concept

High-quality indicators are only useful if they are measured using high-quality data. The data sources used to quantify or rank each of the included indicators can be assessed for:

- Accuracy: Data should correctly describe what it was intended to measure; estimates should be close to true
 values
- **Reliability**: Data should be comparable across counties
- Geographic Coverage: Data should be available for all counties
- Accessibility: Data should be easy to obtain and compile
- Timeliness: Data should be as up-to-date or produced with as little time lag as possible

Measuring Economic Well-Being of County Governments

- Tax capacity is an indicator of a government's potential ability to generate revenue
- Tax capacity typically measured by 2 or 3 largest revenue sources weighted based on relative share of local revenue
 - Adjusted property value per capita (70%)
 - Sales tax base per capita (30%)
 - Tax capacity among local governments varies based on tax base and population
 - Good measure for ability to pay
 - o NOT a direct measure of the economic well-being of county residents
- Useful for determining resource allocation and required local contributions where ability to pay is a factor

Weaknesses in Indicators Used in Development Factors for 2018 Tier Rankings

- Average Monthly Unemployment Rate:
 - Misses discouraged workers, long-term unemployed, and marginally attached individuals who are not seeking work
 - Can fluctuate widely depending on the degree of attachment of workers to a community
 - Employment growth may be a more relevant indicator for measuring economic distress in the context of economic development
- Percentage Growth in Population:
 - Indirectly measures long-term economic distress
 - A decline in population is generally indicative of economic distress, but population growth may occur in response to economic expansion or due to features such as attractive natural amenities
 - Over longer periods, population growth is highly-correlated with employment growth, which is a more direct measure of economic distress
- Adjusted Property Tax Base Per Capita:
 - Measures government resource capacity
 - Not a direct measure of economic distress of county residents
 - Negatively correlated with measures of job quality (i.e. as property tax base per capita increases, average wage decreases)
 - May obscure economic distress in counties with high property values in a small concentrated part of the county such as in coastal counties
- Job quality and economic mobility are important components of the economic distress of residents that are not captured in the current tier ranking.

April 10, 2018

Weaknesses in Indicators Used in Adjustment Factors for 2018 Tier Rankings

- Population:
 - o The number of people living in a county is unrelated to the economic well-being of county residents
 - Automatically designating low-population counties as Tier 1 displaces other counties that are otherwise ranked as more distressed. As a result, this irrelevant measure replaces more relevant measures and reduces the overall "representativeness" of the tier calculation.
- Poverty Rate:
 - Only considered for counties with 12,000-50,000 residents and the cut-off rate is arbitrarily set at 19%, but the relevance of poverty rate does not depend on population size and there is not any one particular poverty rate that indicates distress
 - Measures a similar concept as median household income, but is less accurate (i.e. margins of error are higher) and less reliable (overstates the level of distress in counties with large numbers of students living off-campus)